

**State of Washington
Decision Package**

Agency: 310 Department of Corrections
Decision Package Code/Title: 0G – Maintain Network Capacity

Budget Period: 2005-07

Budget Level: M2 – Inflation and Other Rate Changes

Recommendation Summary Text:

The Department requests funds to maintain Information Technology network capacity at current service levels.

Agency Total

<u>Fiscal Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Total</u>
Operating Expenditures			
001-1 - General Fund – Basic Account-State	\$1,296,000	\$1,197,000	\$2,493,000
Staffing			Annual
FTEs	<u>FY 2006</u> 2.0	<u>FY 2007</u> 2.0	<u>Average</u> 2.0

Program 100-Admin & Program Support

<u>Fiscal Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Total</u>
Operating Expenditures			
001-1 - General Fund – Basic Account-State	\$184,000	\$858,000	\$1,042,000
Staffing			Annual
FTEs	<u>FY 2006</u> 2.0	<u>FY 2007</u> 2.0	<u>Average</u> 2.0

Program 200-Institutional Services

<u>Fiscal Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Total</u>
Operating Expenditures			
001-1 - General Fund – Basic Account-State	\$708,000	\$51,000	\$759,000
Staffing			Annual
FTEs	<u>FY 2006</u> N/A	<u>FY 2007</u> N/A	<u>Average</u> N/A

Program 300-Community Corrections

<u>Fiscal Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Total</u>
Operating Expenditures			
001-1 - General Fund - Basic Account-State	\$404,000	\$288,000	\$692,000
Staffing	FY 2006	FY 2007	Annual
FTEs	N/A	N/A	Average
			N/A

Package Description

The number of users, amount and speed at which information is transmitted, and circuit efficiency with which users access the network, all combine to impact overall network availability. In order to maintain or improve current system level of service, the Department must improve the efficiency for how users access the network, and improve the capacity and capability of the network to accommodate additional sites and additional bandwidth needed to service new applications and increased application use.

Current Department operations have placed the Department's network backbone node equipment at capacity. The Department's remote locations are currently connected to the Department's network backbone with slower than industry standard circuits.

These critical hardware components allow users to access the network and mission critical data and systems. The Department's users already experience network slowdowns that inhibit their ability to do their job efficiently. Slower and less efficient circuits impact timely and reliable access for the individual user. In order to provide faster and more reliable connectivity, these circuits must be upgraded. The lack of capacity on the node equipment and the slower circuits severely limit the Department's ability to meet immediate and future network and operational improvements. This problem is expected to steadily increase as people continue to rely on the network for additional day-to-day business needs. For example, the Department is meeting the changing community supervision workload by deploying staff to outstations and neighborhoods. The deployment of staff in neighborhoods away from centralized offices requires additional network capacity, or bandwidth, to support existing and new remote locations. The node routers must be upgraded with higher capacity equipment that can support the additional interfaces needed to add additional sites and bandwidth to existing Department locations. To resolve this issue, the Department is requesting a full-time position and a two-year project position, to assist in the design, purchase, and implementation of the new node equipment and circuit upgrades.

In addition, the Department proposes to design and pilot a secure remote connectivity solution that utilizes Virtual Private Network (VPN) technology, which allows users to access mission critical data in a secure fashion. This new technology would be targeted for locations where there are a small amount of users and where frame-relay is not cost-effective. One example is the community corrections officers (CCOs) who are mobile throughout the state and who would be better equipped to manage offenders in the community. Existing remote technology used to access mission critical data is dial-up or older wireless technology, which operate at extremely slow speeds and provide minimal data security. Currently, CCOs are unable to remotely access key OMNI data due to inadequate connection speeds throughout the state. The Department is requesting funding to develop a VPN design to allow CCOs to use the internet to access the Department's mission critical data in a secure and adequate manner. The VPN will utilize proven industry standard software to accomplish this project. The Department requests a position to research, design, implement, and support the project and to provide ongoing support for this solution.

Background Information - Distinctions between 2003-2005 Biennium and 2005-2007 Biennium Decision Packages:

2003-2005 Biennium Network Replacement Funding Decision Package

This decision package primarily funded network replacement equipment. It is recurring each biennium. Network replacement dollars were needed to replace outdated network equipment that had reached, or was near to reaching, end-of-support from the vendor. The Department's replacement cycle was 11-12 years, which exceeded the expected useful life of the equipment, and imposed unacceptable risk of failure for crucial equipment. Network replacement dollars replace like-for-like equipment and does not include upgrades or added features or functionality (unless it is a standard issue on the new replacement equipment).

2005-2007 Biennium Maintaining Network Capacity Decision Package

The purpose of this decision package is to request funds for circuit and equipment upgrades needed to provide additional bandwidth to remote locations. Current Department operations have placed the Department's network backbone equipment at capacity. The Department's remote locations are currently connected to the network backbone with slower than industry standard circuits. These critical hardware components allow users to access the network and mission critical data and systems.

Narrative Justification and Impact Statement

How contributes to strategic plan:

This request is critical to agency activities, the strategic plan, and statewide results. The request ensures that the Department has the necessary resources to maintain current levels of service and performance.

This request is required to sustain the agency *Confine Convicted Adults in State Prisons, Health Care Services for Adults in State Prisons, Education of Convicted Adults in State Prisons, Supervise High-Risk Adult Offenders in the Community, Supervise Moderate-Risk Adult Offenders in the Community, Supervise Low-Risk Adult Offenders in the Community, and Corrections - Core Administration*. The resources identified will be directed to support the agency objective to increase IT infrastructure capacity connectivity so that the Department's data is assured by a robust data and information infrastructure. This objective and strategy moves the Department closer to meeting its high-level organizational goal to enhance organizational capacity and competency. This high-level goal is an intermediate outcome and helps achieve statewide results that improve the safety of people and property.

Performance Measure Detail

No measures were submitted for this package.

Reason for change:

The Department's existing network was originally designed when users were remotely accessing mainframe technology at a central location. More effective client-server and web-based applications have become the industry standard and the use of the internet for accessing data and applications. In order to gain the efficiencies found in the new applications, sufficient network capacity must be available.

Impact on clients and services:

The Department will be able to maintain current levels of service to staff and communities. This proposal supports efficient connectivity and the timely delivery of mission critical data applications.

Impact on other state programs:

The Department will be able to continue providing current levels of service and ensure that interruptions associated with equipment failure do not impact service delivery, and continued participation in statewide projects such as the Justice Information Network project.

Relationship to capital budget:

N/A

Required changes to existing RCW, WAC, contract, or plan:

N/A

Alternatives explored by agency:

N/A

Budget impacts in future biennia:

There will be one-time and ongoing costs as follows:

1. One-time circuit install and recurring circuit costs.
2. Increase in Cisco SmartNet recurring maintenance charges.
3. Potential increase in server/software licensing and maintenance depending on the final VPN solution. Potential one-time network equipment and recurring maintenance costs depending on the final VPN solution.
4. Network replacement budget costs will increase with the increase in network equipment in future biennia.
5. Ongoing costs for one position and one-time costs for the project position.

Additionally, once the VPN design is complete and the pilot has verified that the Department's remote access needs for performance and security can be met, there will be additional funds needed to implement the solution statewide. This funding will have to be obtained through a future biennium request.

Effects of non-funding:

Not funding this request will contribute to network capacity limitations. Without the appropriate network capacity, the Department's users will experience network slowdowns that will get progressively worse as network use increases. As a result, many mission critical applications such as Offender Management Network Information (OMNI) system, Offender Based Tracking System (OBTS), Active Directory/State Forest, Roster Management, Liberty Imaging System, Trust Accounting System, and Human Resource Management System may not be able to run in an efficient manner on the network. Lack of capacity and bandwidth can lead to network outages and some applications may become unavailable.

Expenditure Calculations and Assumptions:

This proposal is based on the following assumptions:

- The staffing costs include funding for one permanent position (Information Technology Systems Specialist 6) and one project position (Information Technology Systems Specialist 5), salaries, benefits, goods and services, and travel.
- The costs of upgrading the Department's network backbone (node equipment) to support additional users and information needs includes all equipment to accomplish this upgrade at \$682,000 and yearly software maintenance of \$32,000.
- The Department pays DIS for the circuits. The cost of upgrading outdated data circuits to provide fast and reliable connectivity to outstations and field offices is \$322,000 and a one-time cost of \$90,000.
- The cost of designing and piloting a secure remote connectivity solution that utilizes VPN technology and will allow users to access mission critical data in a secure fashion without a direct access to the

Department's network will cost \$400,000. This cost is for a consultant to gather requirements and perform design work. Additionally, there are one-time equipment costs of \$72,000, and user and server licenses and maintenance of \$211,000.

<u>Object Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Total</u>
A Salaries and Wages	\$127,000	\$127,000	\$254,000
B Employee Benefits	\$37,000	\$37,000	\$74,000
C Personal Service Contracts	\$0	\$400,000	\$400,000
E Goods and Services	\$348,000	\$559,000	\$907,000
G Travel	\$2,000	\$2,000	\$4,000
J Capital Outlays	\$782,000	\$72,000	\$854,000
Total Objects	\$1,296,000	\$1,197,000	\$2,493,000

